



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,489	09/20/2006	Tooru Sekiya	0095/025001	2585
22893	7590	11/15/2007		
SMITH PATENT OFFICE 1901 PENNSYLVANIA AVENUE N W SUITE 901 WASHINGTON, DC 20006			EXAMINER ANDERSON, DENISE R	
			ART UNIT	PAPER NUMBER
			1797	
			MAIL DATE	DELIVERY MODE
			11/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/593,489		SEKIYA ET AL.	
	Examiner		Art Unit	
	Denise R. Anderson		1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20 September 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Organo (JP 2,766,959 B2, June 18, 1998, including the Derwent database entry), in

view of Gershenson (US Patent No. 6,511,598 B2, Jan. 28, 2003). The claims appear below in italics with the prior art and examiner's comments in normal font.

Claim 1. A swelling/contracting filter (Organo, Title, where the invention is a "swelling-shrinkable type filter device") *comprising a bag-like filtrating cloth* (Organo, Abstract, where the filter "includes a cylindrical or bag-shaped filter" made of a "flexible filtering sheet") *allowed to swell and contract and a flow passage material* (Organo, Abstract, where the filter, i.e. applicant's filtering cloth, includes a "filtrate-extracting device inserted into filter while one end is projected outside the filter") *disposed in said filtrating cloth for collecting and discharging a liquid filtrated by said filtrating cloth, characterized in that said filtrating cloth and said flow passage material are both formed of flexible materials* (Organo, Abstract, where the filter "includes a cylindrical or bag-shaped filter" made of a "flexible filtering sheet"; Gershenson, Abstract, where the "filter assembly includes two cylindrically shaped and concentrically arranged flexible media sleeves (302, 301)"), respectively.

Organo discloses the claimed invention except for the flow passage material being formed of a flexible material. Gershenson teaches that it is known to make the flow passage material flexible in the context of a "filter element assembly" (applicant's filter) that "include two cylindrically shaped and concentrically arranged flexible media sleeves (302, 301)." Gershenson, Abstract, Figures 10 and 11. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the Organo flow passage material of

flexible materials as taught by Gershenson, since Gershenson states at Column 3, lines 40-47, that such a modification would achieve "increased dirt holding capacity and increased filtration surface area while minimizing liquid capacity" and would further "provide a liquid filtration element usable in bag filter type vessels which will permit the use of a second stage filter within the same housing."

In summary, Organo, in view of Gershenson, discloses or suggests all claim 1 limitations.

Claim 2. The swelling/contracting filter according to claim 1, wherein said flow passage material comprises a plate-like material.

Organo, in view of Gershenson, discloses or suggests all claim 1 limitations. Organo further discloses flow passage material in the shape of a plate in Figure 6.

Claim 3. The swelling/contracting filter according to claim 1, wherein said flow passage material is provided with a groove extending in a direction in which said filtrated liquid is discharged.

Organo, in view of Gershenson, discloses or suggests all claim 1 limitations. Organo further discloses, in Figure 6, flow passage material with grooves extending perpendicular to the direction in which the filtrated liquid is discharged – not extending in the direction in which the filtrated liquid is discharged as

recited in the claim. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have turned the Organo grooves ninety degrees as recited in the claim, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

In summary, Organo, in view of Gershenson, discloses or suggests all claim 3 limitations.

Claim 4. The swelling/contracting filter according to claim 3, wherein a plurality of grooves are provided on both surfaces of said flow passage material, respectively.

Organo, in view of Gershenson, discloses or suggests all claim 3 limitations. Organo further discloses, in Figure 6, flow passage material with a plurality of grooves.

Claim 5. The swelling/contracting filter according to claim 1, wherein a width of said flow passage material is set to be equal to or less than an inner diameter of said filtrating cloth determined when said filtrating cloth is swelled in a cylindrical form.

Organo, in view of Gershenson, discloses or suggests all claim 1 limitations. Organo further discloses, in Figures 5-7, the flow passage material width being

less than the inner diameter of the filtering cloth when the filter cloth is swelled in a cylindrical form.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references show many of the swelling/contracting filter limitations recited in the claimed invention.

US 6527954 B1	03/04/2003	Furuhashi; Susumu	210/315
US 6355171 B1	03/12/2002	Rose; Stephen W. et al.	210/323.2

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Denise R. Anderson whose telephone number is 571-270-3166. The examiner can normally be reached on Monday through Thursday, from 8:00 am to 6:00 pm.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter D. Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Application/Control Number:
10/593,489
Art Unit: 1797

Page 7

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DRA


WALTER D. GRIFFIN
SUPERVISORY PATENT EXAMINER